

MARITIME CONTACTS OF THE PAST

Deciphering Connections Amongst Communities



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The Indian Ocean in the Seventh and Eighth Centuries

3

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The study of Eurasia in the seventh century is dominated by the history of the origins of the Muslim caliphate and the Tang Dynasty. The first Tang emperor, Gaozu, ascended the throne in 618 AD, and the hegira took place in 622 AD, year one of the Muslim calendar. That these two developments should be so central is understandable. Within little more than a hundred years of its establishment, Islam was the dominant religion across an arc of Asia and Africa from Portugal to Kazakhstan, where it butted up against the armies of the Tang Dynasty, which had simultaneously pushed China's borders west across two thousand miles of desert and steppe. Yet at the very moment of immediate contact, a series of domestic crises within the Dar al-Islam and in China directed merchants' attention away from the Silk Road across Central Asia to the 'Silk Road of the Sea'. Bustling maritime markets at either end of this sea route from southwest to northeast Asia drew merchants and mendicants from around the Monsoon Seas and helped give their respective empires a cosmopolitan flourish. Of greater significance, however, rulers of nascent states lying along this primary sea route were able to tap the wealth generated by this trade to consolidate power and forge durable and influential states. Chief among these were the Chola and Srivijayan kingdoms, through whose waters virtually all shipping sailing around the Indian subcontinent or through the Strait of Melaka, respectively, had to pass. Merchants from both kingdoms became active participants in long-distance trade, sharing their experience and institutions with other seafaring communities to create a hybrid and, to all appearances, seamless commercial system dominated by no one group or state.

Buddhist Travellers between India and China

Towards the end of the seventh century, a Chinese Buddhist named Yijing recorded the peregrinations of more than ten monks, himself among them, who had gone to or attempted to visit India to study Buddhist texts. In 673 AD, an imperial envoy helped Yijing get to Guangzhou where he 'fixed the date of meeting with the owner of a Persian ship to embark for the south'. The ship sailed at the start of the winter (northeast) monsoon and after weathering storms in which 'the pair of sails, each in five lengths [of material], flew away, leaving the sombre north behind', made its first port of call on either Java or Sumatra before continuing to Kedah on the Malay Peninsula. From Kedah he sailed for the mouth of the Ganges via the Andaman Islands, 'the land of the Naked People' who 'eagerly embarked in little boats, their number being fully a hundred. They all brought cocoa-nuts, bananas, and things made of rattan-cane and bamboos and wished to exchange them. What they are anxious to get is iron only' (Yijing, 1966: xxviii-xxx). Yijing does not say whether he was still aboard a Persian ship at this point, and he may well have boarded a Malay or Indian vessel to cross the Bay of Bengal for Tamralipti (Tamluk) on

the Rupanarayana River, a major port of entry into northern India since Mauryan times. Earlier in the century, another Chinese monk named Xuanzang had described Tamralipti as a flourishing, protected port in 'a recess of the sea; the water and the land embracing each other. Wonderful articles of value and gems are collected in abundance, therefore the people of the country are in general very rich' (Xuanzang, 1969: 200-201)¹. But Tamralipti thrived not as a pilgrim port, but because Bengal was a source of commercial goods, notably cotton, 'the like of which is not found in any other' kingdom, according to a ninth-century trader named Sulayman al-Tajir. 'A piece of this cloth can be passed through the circle of a ring as it is so fine and beautiful'. Finished cotton was a staple of the maritime trade to Southeast Asia, where cotton manufacturing became an important craft in its own right, as well as to China.

From Tamralipti Yijing made his way up the Ganges to the Buddhist monastery complex at Nalanda, which was then home to more than thirty-five hundred monks. He also visited other monasteries, narrowly escaping death from disease and robbers in the process. En route home, he sailed from Tamralipti with half a million 'slokas (belonging to the Tripitaka), which, if translated into Chinese, would make a thousand volumes'. Yijing does not elaborate on the particulars of his return passage except to say that he stopped first at Kedah, and then in the 'fortified city of Bhoga (Srivijaya, where) Buddhist priests number more than 1,000, whose minds are bent on learning and good practices'. Buddhism was so well established in Srivijaya by this time that Yijing (1966: xxxiii-xxxiv) recommended that any Chinese intent on studying in the west 'had better stay here one or two years and practise the proper rules' before continuing on to India². While the dangers encountered by Yijing and his fellow monks were considerable, they were hardly worse than those encountered by overland travellers, and as his experiences beyond the confines of Nalanda show, peregrinations ashore were neither safer nor more comfortable than travel by sea. Whether merchant or monk, no matter how one travelled to India the journey was arduous.

Further confirmation of the long-distance trade and the intricacies of contemporary Asian politics in the decades after Yijing comes from the Chinese biography of Vajrabodhi, a Buddhist monk from southern India. After studying at Nalanda and elsewhere, Vajrabodhi was invited to the Pallava Kingdom in southeast India where he lived for about two decades. At the end of the 710s, he sought permission to go to China. The Pallava King, Narasimhavarman II (690-728 AD), was anxious to establish good relations with China, both as an outlet for trade and for the prestige that flowed from such an association, and Vajrabodhi was accompanied by an envoy tasked with the impractical if diplomatic gesture of offering military support to Emperor Tang Xuanzong, who was then at war with both Arabs and Tibetans. Stopping in Sri Lanka, their ship joined a fleet of thirty Persian vessels, each said to have a complement of five to six hundred people and cargos of precious stones, among other things. According to one of his biographers, all the ships

were lost at sea, except the one in which Vajrabodhi and the envoy were sailing. Reaching Guangzhou in 719 AD, the two made their way to Luoyang. Although Xuanzong was a Daoist, Vajrabodhi ingratiated himself by praying for the end of a drought and bringing relief to the emperor's dying daughter. An acclaimed translator of Buddhist texts, he remained in China until his death in 741. The Pallava envoy's mission also proved successful, and Xuanzong acknowledged Narasimhavarman as a king and bestowed on his forces the title of 'Southern Indian Army Which Cherishes Virtue', although the Pallavas played no role in China's conflicts with Tibet or the caliphate (Chou, 1945: 274-75; Sen, 1995: 26-27).

Written less than half a century apart, these accounts by the Chinese Yijing and Indian Vajrabodhi outline in broad strokes the increasingly dense web of trade and communication being spun across the Monsoon Seas from the Persian Gulf to the China Seas in the seventh century. Segments of this long-distance exchange had been in place for centuries. The Byzantine Emperor Justinian had encouraged the traders of Axum in Ethiopia to compete with Persian merchants to undercut their dominance of the trade of the western Indian Ocean in the sixth century; Chinese envoys had observed trade across the Bay of Bengal; and traffic through the Strait of Melaka had given strength to the emerging states on Sumatra, the Malay Peninsula and southern Vietnam. By the seventh century, mariners on the Monsoon Seas were gaining ever more confidence and expanding the scope of their voyaging; and where they sailed, new political powers were growing up in India and Southeast Asia. This engendered a virtuous circle in which the transmission of goods and culture benefited local and regional rulers whose increasingly powerful and stable states in turn drew the attention of merchants from ever greater distances. In the accounts of these itinerant monks and other sources we can identify a long list of transformative exports like Sanskrit and various Indian scripts for religious and secular purposes, architectural styles and principles of statecraft. So in the early years of the Pala Empire, which arose in northeast India in the middle of the eighth century, monks from Nalanda helped establish Buddhism in the Sailendra kingdom of Java (Hall, 1999: 202-204). Their writings make monks among the most conspicuous ocean travellers of the time, but they sailed as passengers in the ships of merchants whose primary if not exclusive interest was generating profits from trade. The commercial orientation of Persian seafarers at this time is the subject of an observation by another Chinese monk named Huichau, who described the merchants from the Persian Gulf:

The inhabitants being by nature bent on commerce, they are in the habit of sailing in big craft on the western sea, and they enter the southern sea to the country of the Lions (Sri Lanka), where they get precious stones, for which reason it is said of the country that it produces precious stones. They also go to the Kunlun country (Southeast Asia) to fetch gold. They also sail in big craft to the country of Han, straight to (Guangzhou) for silk piece goods and the like ware (Hadi Hasan, 1928: 103-104).

For these authors, long-distance maritime commerce on the Monsoon Seas is unremarkable, and indeed there was nothing new about sea trade on the Indian Ocean. What was new in the seventh century was the rapid consolidation and growth of markets at either end of the six-thousand-mile arc between the Arabian Sea and the South China Sea, those of Tang Dynasty China, established in 618 AD, and of the Islamic caliphate, whose calendar begins four years later. Attention to these states with their formidable record of political, military, commercial and cultural power overshadows that of the states of South and Southeast Asia. But these far-flung regions anchored a network of rapidly increasing interdependence in which changes in one place could have ripple effects that spread from region to region. One reason for the change in pace was the rise of the 'Silk Road of the Sea', the increased reliance on which resulted from disruptions along the overland silk road across Central Asia which forced Arabs and Chinese alike to look south to the Monsoon Seas.

Muslim Mariners in the Indian Ocean

At the start of the seventh century, the Middle East was divided between the Byzantine Empire, which controlled most of Asia Minor, the Levant and Egypt, and the Sasanian Empire, which encompassed Persia, Iraq, and parts of eastern Asia Minor. On the Arabian Peninsula the Sasanians controlled the island of Bahrain as well as the adjacent mainland territory of al-Bahrayn (the coast from Kuwait to Qatar), Oman at the southeast corner of the peninsula, and Yemen, with its port of Aden on the Arabian Sea. Other parts of Arabia lay beyond the reach of imperial rule: the Hejaz, which borders the Red Sea and includes the holy cities of Mecca and Medina; Hadramawt, on the south coast between Yemen and Oman; and Yamana, an inland territory in northern Arabia. Sasanian mariners had been sailing to China since perhaps the second century, and before the start of the Islamic era Ubulla, at the head of the Persian Gulf, was renowned as 'the port to al-Bahrain, Uman, al-Hind and as-Sin (that is, India)' (Baladhuri, 2002: 53). Muslim armies reached Ubulla and al-Basrah in 635 AD and the Sasanian Empire fell fifteen years later, but there is no evidence of any interruption in long-distance trade.

Given that the trade between the Persian Gulf and China antedated the seventh century, its subsequent history cannot be described solely in terms of how it was affected by the rise of Islam or Tang China. Nonetheless, from this point on its commercial prosperity was deeply entwined with that of Asia's two most expansive powers. In 634 AD, Muslim armies took the great Syrian trading city of Damascus, which became the capital of the caliphate for more than a century, and Persia was conquered in 643 AD. By the start of the Umayyad Caliphate in 661 AD, Islam held sway across the Arabian Peninsula, Mesopotamia and eastern Asia Minor, and Muslim armies had advanced into the Caucasus Mountains. East of the Caspian Sea, between 694 and 714, al-Hajjaj ibn Yusuf ath-

Thaqafi, viceroy of al-Iraq, campaigned into Afghanistan and across the Amu Darya as far as the Jaxartes River about 325 km to the north, and many of the Persian and Turkic people of Transoxiana (the heart of modern Uzbekistan) began converting from Zoroastrianism, Buddhism and Christianity to Islam. Transoxiana was especially important because the western arteries of the Silk Road passed through it en route to Kashgar on the western edge of the Taklimakan Desert, where they merged with routes from Afghanistan and India. At mid-century, Muslim expansion into Central Asia slowed. Although Abbasid forces defeated the Chinese at the battle of the Talas River in modern Kazakhstan in 751 AD, Tibetan tribes moving north checked their eastward advance. At the height of their expansionist phase, the Tibetans fought the Chinese and Arabs as well as the Buddhist Palas of Bengal in the east. Although the Tibetans were eventually contained by Muslim and Chinese armies acting simultaneously, though not in concert, their disruptions forced merchants to exploit more fully the sea routes between the Persian Gulf, India, Southeast Asia and China. To the south, Muslim armies reached the head of the Persian Gulf in 635 AD where they established a military encampment at al-Basrah and by the start of the eighth century, Islam had spread as far as the Indus River and its adherents included many Persian and Omani mariners who carried their new religion with them on trade routes that flourished as the Muslim caliphate increased in wealth and extent.

The increase in trade without an accompanying extension of political authority led to an increase in piracy in the Arabian Sea between the Indus delta and Gujarat. In an effort to restore order, al-Hajjaj ordered Muslim armies into the Indian subcontinent in 711 AD. Although this could be considered a natural extension of al-Hajjaj's campaign in Afghanistan, according to the ninth-century historian al-Baladhuri (2002: 215-17; Hitti, 1970: 207-208), the *casus belli* was quite specific:

The king of the island of Rubies (Sri Lanka) sent to al-Hajjaj some women who were born in his country as Moslems, their fathers, who had been merchants, having died. He wanted to court favour with al-Hajjaj by sending them back. But the ship on which they were sailing was attacked by some of the Meds of ad-Daibul (Banbhore, Pakistan) in barks, and was captured with all that was in it. Al-Hajjaj authorized a series of punitive expeditions the last of which, led by Muhammad ibn-al-Kasim was reinforced by 'ships laden with men, weapons and supplies' (Baladhuri, 2002: 217).

Ibn-al-Kasim conquered the port of Daybul, slew its king, and forced the submission of Sind, an area roughly coterminous with modern Pakistan. Many of the Buddhist inhabitants converted to Islam, and the conquest helped restore order to the shipping routes that skirted northwest India and the coasts of Konkan and Malabar south to Sri Lanka. But Sind would prove the eastern limit of Islam's territorial expansion in South Asia for three hundred years.

The Abbasids

Despite their great progress in spreading Islam, the Umayyad caliphs in Damascus suffered the strains of ancient tribal factions overlaid with theological schisms and tensions between Arab Muslims and foreign converts. Tensions were especially acute between Arabs and Persians, whose cultural and imperial identity had far deeper and broader roots than those of anyone else inundated in this wave of Arab conquest. When a collateral descendant of Muhammad named Abu al-‘Abbas as-Saffah rebelled against the Umayyads, troops from Khurasan in northern Persia supported him and he was proclaimed caliph in 749 AD. Abu al-‘Abbas established himself at al-Kufah, on the lower Euphrates, but his brother and successor Abu Jafar al-Mansur erected a new Abbasid capital at Baghdad in 761-762, on the west bank of the Tigris. The transfer of the administrative machinery of state 750 km east of Damascus spelled the end of Syrian predominance in the Muslim world and turned the caliphate’s focus from the Mediterranean and North Africa to Central Asia and the Indian Ocean, with enormous repercussions for the trade of the Monsoon Seas. According to the ninth-century geographer al-Yaqubi, the site of Baghdad had been revealed to al-Mansur, who predicted that it would become ‘a water-front for the world. Everything that comes on the Tigris from Wasit, al-Basrah, al-Ahwaz, Faris, Uman, al-Yamanah, al-Bahrayn, and the neighbouring places, can go up to it and anchor at it. In the same way whatever is carried on boats on the Tigris from Mosul, Diyar Rabiah, Azerbaijan and Armenia, and whatever is carried on boats on the Euphrates from Diyar Mudar, al-Raqqah, Syria, the Frontier, Egypt and North Africa, can come to this terminus and unload here’. A further advantage was that it was easily defended. Two centuries after al-Yaqubi, the geographer al-Muqaddasi recalled the advice given to al-Mansur, which in his rendering noted that Baghdad was ‘in a place between rivers so that the enemy cannot reach you except by ship, or by bridge, by way of the Tigris or the Euphrates’ (Muqaddasi, 1994: 100).

Within fifty years of Baghdad’s founding the population had swollen to perhaps half a million people, making it the largest city in the world outside of China; in the west, its nearest rivals were Constantinople, Alexandria, Damascus and al-Basrah. The city’s meteoric rise owed much to its location on the Tigris in central Iraq, astride the continental trade routes between Persia, Central Asia and India in the east, and the Arabian Peninsula, Syria, the Mediterranean and North Africa in the west. The river banks were lined with shipping, from round reed quffat sent downriver from the hill country around Mosul, to seagoing ships fresh from voyages on the Persian Gulf and the Indian Ocean. Canals provided access to the Euphrates, fifty km to the west, and the trade of the Levant, while Baghdad was a terminus of the pilgrim road from Mecca in the southwest and of the road from Khurasan and the Silk Road of Central Asia to the northeast. Although the capital was nearly five hundred km upriver from the Persian Gulf, as al-Yaqubi wrote, the Tigris did open Baghdad to the trade of the Indian Ocean world: ‘This is the Tigris; there is no

obstacle between us and China; everything on the sea can come to us on it' (Hourani, 1995: 64). By the tenth century, Baghdad was possibly the busiest port in the world, while its outports - as far as southern Iran and the island of Socotra - were described as 'the frontier of India' (Wink, 1996: 53).

Although their prosperity declined in the final decades of the Sasanian Empire, the Persian Gulf ports of Uballa, al-Basrah and Siraf remained active in long-distance trade during the transition from Sasanian to Muslim rule. As one of two capitals of the Umayyad province of Iraq (the other was al-Kufah), al-Basrah quickly eclipsed Uballa, although its success owed more to politics than geography. The original military camp was fifteen km from the Shatt al-Arab and functioned as a port only thanks to a canal that connected it to Uballa. Nonetheless, al-Basrah attracted shipping from around the Muslim world and beyond. Well before it became a port of entry for Baghdad, which was founded more than a century later, al-Basrah flourished in its own right. At its peak during the eighth and ninth centuries it was home to more than two hundred thousand people of many faiths and ethnicities, and it was noted for its manufactures, agriculture (dates in particular), as well as its vibrant literary, artistic and religious communities (Hitti, 1970: 241). (Medieval al-Basrah eventually gave way to the modern port of Basra, which was founded on the site of Uballa in the 1700s).

Al-Basra's primary rival was Siraf, on the Iranian shore about three hundred seventy five miles from the head of the gulf. Founded by the fourth-century Sasanian King Shapur II, Siraf had a spacious roadstead that accommodated deeper draft ships more easily than did the ports of the northern gulf, but it was situated in an otherwise hostile environment subject to extreme heat and lacking sufficient water to sustain a large population, much less agriculture. The latter problem was overcome by the construction of cisterns and freshwater canals that fed beautiful gardens cultivated by the wealthy merchant elite, which prospered from the trade of Shiraz, the capital of the Persian province of Fars two hundred twenty-five km to the northeast, as well as al-Basrah and Baghdad (Wink, 1996: 55). Siraf's praises were sung by geographers and historians throughout the Abbasid era, and with good reason: its merchants could be found sailing as far as China, while they imported teak and other woods from India and East Africa for constructing houses, mosques and navigation towers called *khashabs*, and for shipbuilding. Comparing Siraf with Shiraz, the tenth century Persian geographer al-Istakhri noted, 'Siraf nearly equalled Shiraz in size and splendour; the houses were built of teakwood brought from the Zanj country and were several stories high, built to overlook the sea' (Hadi Hasan, 1928: 115 n. 3).

The Red Sea and East Africa

At first blush it seems paradoxical that the Muslim capture of Egypt in the seventh century did not lead to an increase in traffic on the Red Sea, apart from the pilgrim and grain

trade from Egypt to Mecca. The Nile and Red Sea had been vital avenues for exchange between the Mediterranean and the Indian Ocean since antiquity, but the establishment of Baghdad made the Persian Gulf the main terminus of trade from the western Indian Ocean. Before the Fatimid revival of the tenth century, such commerce as flowed through the Red Sea was in the hands of Persian Gulf mariners who frequented Jeddah and Aden. Although the period of the latter's greatest prosperity was yet to come, in the ninth century one already could find there 'all the merchandise of Sind, Hind, China, Zanzibar, Abyssinia, Fars (Persia), Basra, Jiddah, and Kulzum' (Wink, 1996: 29). In 646 the Orthodox caliph Uthman had designated Jeddah as the port of Mecca, about seventy-five km to the southeast. Surrounded by salt flats and reefs through which ships can enter only via a narrow entrance, Jeddah was nonetheless one of the most important harbours in the Muslim world, especially during the hajj, when the bulk of grain and other supplies for the pilgrims—and in some periods a majority of the pilgrims themselves—came by sea via Qulzum (Suez). It was also a major entrepôt for goods bound to or from Egypt because it was more dangerous and less profitable for larger Indian Ocean ships to sail north of Jeddah, and most stopped there to trans-ship goods to and from smaller vessels or caravans. Red Sea traffic increased with the rejuvenation of Egypt's commercial prosperity under the Fatimids in the tenth century, and again after 1160 when the Seljuq occupation of the Sinai rendered the overland route from North Africa to Mecca impassable. This forced prospective hajjis travelling via Egypt to embark on a three-stage journey that took them by boat up the Nile to Qus or Aswan, where they joined a camel caravan that took three weeks to reach the humble port of Aydhab, where they crossed the sea to Jeddah.

So long as Baghdad remained the primary market of the western Indian Ocean, the Red Sea functioned as a branch line for Persian Gulf shipping with few direct overseas connections. Even though one could find a wealth of merchandise in Aden, much of this passed through Persian Gulf ports first. This was true even of goods from East Africa, despite al-Basrah's being a thousand miles farther from East African ports than Aden is. And if Ubulla, Siraf, Suhar and Socotra constituted the 'frontier of India', they were equally the frontier of East Africa. Persian Gulf trade with East Africa was not a new endeavour, but with the coming of Islam there was a concerted push south of the Horn of Africa, where Muslim traders began to exert a distinct though limited influence. After their foray into Yemen in the sixth century, Aksumites had abandoned their maritime aspirations and Omani traders from Siraf and Suhar gradually assumed their role on the African coast north of the Horn of Africa. By no later than the eighth century they were settled on the island of Socotra, which they used as a staging ground for trading and raiding beyond the Horn (Risso, 1995: 14; Wilkinson, 1981: 278). Exports from East Africa were varied but consisted chiefly of natural resources, principally gold, mangrove wood, tortoise shell, iron for Indian metalsmiths, and ivory. Imports are harder to determine until the ninth-century, when Chinese ceramics and glass were added to the manifest of

Muslim and Indian merchants. Because these are less perishable than organic materials, it is easier to trace their distribution through time and space, which is one reason the history of East Africa comes into comparatively clear focus at this time (Rougeulle, 1999: 159). Yet there was another less heralded mainstay of Indian Ocean commerce, especially in the early Muslim period: the trade in enslaved Africans. There were already enough slaves in Mesopotamia to mount the first of several rebellions in the 680s, but the traffic in slaves shot up in the ninth century and between 850 and 1000, slavers shipped an estimated 2.5 million black Africans from south of the Horn of Africa, which in time was called the Cape of Slaves. Another 10 million followed before 1900.

South Asia

One reason that Muslim expansion into India stalled after the capture of Daybul is that India was also undergoing a major political realignment that saw the rise of a number of powerful kingdoms, some founded primarily on territorial expansion, others on overseas trade (Wink, 1996: 225, 230, 256). The number of sixth-century Indian dynasties and kingdoms is almost incalculable; the borders of even the most enduring were mutable, and the incomplete historical record shows that many were short-lived. By the start of the seventh century, however, central and southern India were dominated by the dynasties of the Chalukyas, whose origins lay in Karnataka in the southwest, and the Pallavas in the southeast. Under Pulakeshin II (609-642 AD), the Chalukyas conquered the Konkan coast between the Gulf of Khambhat and modern Goa, and sent a fleet of a hundred ships against a place called Puri, possibly Elephanta Island in the harbour of modern Mumbai. Crossing the Narmada River into north India, the Chalukyas marched east to Orissa and Andhra Pradesh, and having spanned the subcontinent, Pulakeshin was known as 'lord of both the eastern and the western seas'. He next attacked the Pallava Kingdom. Closely related to the Chola rulers of Tamil Nadu, the Pallavas were heavily invested in the long distance trade of the Bay of Bengal and they clashed repeatedly with the Chalukyas. The struggle for control of southern India swung back and forth for more than a century and embroiled a host of smaller states, especially the Pandyas of the far south, who allied with the Chalukyas, and the Cheras of the southwest coast and the Sri Lankan kings, who sided with the Pallavas (Keay, 2000: 160-74; Thapar, 2002: 328-30).

Contemporary with the start of the Abbasid caliphate in the mid-eighth century, two major powers emerged in northern India, the Rashtrakuta Dynasty founded by a Chalukya general, and the Buddhist Palas of Bengal and the eastern Ganges Valley. Pala rule continued until the Muslim conquest in the thirteenth century, when Buddhism was virtually eliminated from the land of its origin, but in the meantime the Palas exerted a pronounced influence on Buddhist practice in Southeast Asia and China where the religion continued to flourish (Wink, 1996: 270). To the southwest, the Rashtrakutas forged one of India's most extensive and wealthiest empires, which controlled the western coast of the subcontinent as far

south as Kerala. Much of its wealth came from the commerce that flowed through ports in Gujarat and Konkan, which were home to communities of Persian and Arab Muslim traders as well as Jews, Nestorian Christians, Buddhists and Jains (Wink, 1996: 304-306).

Plying the old Sasanian routes to India, Sri Lanka, Southeast Asia and China, Muslim traders from Arabia and the Persian Gulf planted the faith and customs of their lands and tribes of origin—Persian or Arab, Omani, Hadrami or Yemeni—and established expatriate communities notable for the accommodations they struck with their host rulers and each other. Muslim trading communities along the Konkan coast between Khambhat and Saymur (Chaul) were quite large and had considerable autonomy. Tenth-century Saymur had a population of about ten thousand *bayasira*, people born in India of Muslim parents, as well as first-generation merchants and settlers from Oman, Siraf, al-Basrah and Baghdad (Wink, 1996: 68-72, 76; Ahmad, 1954: 511). Their communal leader served at the pleasure of the Rashtrakuta king and was presumably responsible for the appointment of port authorities and other officials who looked after Muslims' affairs. Among the other officials serving the Silahara rulers of the Konkan were a number of people identified as *nauvittaka*, 'one whose wealth (*vitta*) lies in his (possessing) ships or *nau*' some of whom were specifically exempted from paying the customs dues and tolls normally owed the king (Chakravarti, 2000: 37, 39-40).

Islam was also transplanted farther south to the Malabar Coast of Karnataka and Kerala and to Sri Lanka. Caste restrictions prevented intermarriage between Muslim merchants and anyone except low-caste Hindus with whom they often contracted 'temporary marriages'. The offspring of these unions were known as Mappila, from the Malayalam meaning 'big children', and in time this was the name applied to the community of mestizo Muslims as a whole, which survived until well after the arrival of the Portuguese in the sixteenth century (Wink, 1996: 72). Muslims were by no means the first expatriate communities established in India, where they were preceded by the Greek and Roman Yavanas of antiquity, and subsequently by Jews, Nestorian Christians and Zoroastrian Persians. Although the last had traded with India under the Sasanian Empire, a seventeenth-century English merchant preserved a story about one group that immigrated to India to escape Muslim persecution. The Persians are said to have taken a fleet of seven ships from the Persian Gulf and settled at Swaley, Surat and Khambhat, in each place making a treaty with the local raja explaining why they had come and begging leave 'to be admitted as sojourners with them, using their own law and religion, but yielding themselves in subjection to their government', in other words, to become autonomous subjects of the raja (Lord, 1630: 3). (Interestingly, according to the sixteenth-century *Kilwa Chronicle*, that East African city was founded by Ali ibn al-Husayn, the son of a sultan of Shiraz (Chittick, 1974: 13-17). Sailing in seven ships, al-Husayn, his five brothers and his father established themselves in seven locations in the Comoros Islands and on the mainland

opposite the Lamu Archipelago, which al-Husayn is said to have bartered from a mainland ruler for some cloth.)

The Way East

In the early Muslim period, ships sailed the entire passage from the Persian Gulf to China, though the trip was broken by frequent stops. The fullest rendering of an itinerary from the Persian Gulf is the ninth-century account by Sulayman al-Tajir, who traded in China around 850. Because the largest ships could not reach the head of the Persian Gulf, on the first stage of the journey east, 'the goods are carried to Siraf from al-Basra, 'Uman and other [ports], and then they are loaded on the Chinese boats at Siraf. This is because the waves are abundant in this sea and the water is at a low (level) in some places' (al-Tajir, 1989: 38). (This use of 'Chinese' refers not to ships built in or coming from China, but to those that traded to China, in the same way that nineteenth-century European and American square-riggers in the tea trade were referred to as China clippers [Hourani, 1995: 75]). The first port of call was at Masqat on the Musandam Peninsula, where crews topped up their water before embarking on the month-long passage to Kulam Malay (Quilon), where shipmasters bound for China paid duties of a thousand dirhams. After rounding India and Sri Lanka they called in the Nicobar Islands, again for water, although there was also a small-scale trade in ambergris which the natives exchanged for iron. They next sailed to Kalah (probably Takuapa, on the Malay Peninsula south of the Kra Isthmus) and then on to Sumatra. Once through the Strait of Melaka, the ships might call at the Buddhist kingdom of 'Zabaj' or sail directly across the South China Sea to Champa (southern Vietnam) and from there to the Chinese port of Guangzhou³.

By al-Tajir's time, Persian Gulf mariners seem to have stopped trying to make the entire passage to China in one ship. One might realize some savings by freighting goods in one's own ship rather than in a series of different vessels, but the risks involved in consigning all one's goods to a single ship were considerable, especially on a round trip voyage of more than twelve thousand miles. Major changes taking place along the length of the sea route also made breaking the trip more worthwhile. In 879, the Tang Dynasty was convulsed by a rebellion led by Huang Chao, whose forces massacred the expatriate merchant community in Guangzhou. Reluctant to return to China, and already suffering the effects of a decade-long slave uprising in Iraq, Muslim merchants began concentrating their efforts in Southeast Asia, the ports of which had previously been of little interest except as stopping places on the way to China. With the Abbasids faltering in the west and the Tang Dynasty collapsing in the east, merchants sought out new opportunities in Srivijaya and in Champa, which remains home to the only significant Muslim population in mainland Southeast Asia north of the Malay Peninsula (Hall, 1985: 183; Wade, 2009: 243). Local merchants and rulers were receptive to the new opportunities for business, and exiles from strife-torn China 'fraternized freely with the local population owing to the fairness,

good behaviour and gentle manners of the natives. It is for this reason that this island [Sumatra] is so thickly populated and so frequently visited by foreigners' (Di Meglio, 1970: 113). Srivijaya was quickly recognized as a major source of trade goods in its own right, including pearls, ambergris, precious woods, aromatics and spices - principally cloves, nutmeg and mace from the Spice Islands of the eastern Indonesian Archipelago - as well as rare birds and animals.

Indian Ocean Ships

According to Chinese sources, the largest ships calling at the southern ports of entry in Annam and Guangzhou were from Sri Lanka and had 'stairways for loading and unloading which are several tens of feet in height', while the Persians (who sailed via Sri Lanka) were said to 'sail in big craft to the country of Han, straight to [Guangzhou] for silk piece goods and the like wares' (Gunawardana, 1987: 65; Hadi Hasan, 1928: 103-104.) An early ninth-century ship found off Belitung Island in the Java Sea is the only vessel of the Indian Ocean shipbuilding tradition known from this period. Believed to have sunk around 826, it was built either in India or in the Persian Gulf region using imported Indian rosewood, teak and a species of conifer, and *Afzelia bipindensis* from the African rain forest. The Belitung ship probably measured between twenty and twenty-two meters in length, with a beam of about eight meters, and a depth of hull of more than three meters. The hull was fastened by discontinuous stitching that passed through the planks and over the seams between the planks, a style considered typical of Indian Ocean shipbuilding and it was stiffened by frames stitched directly to the planks, again with the lashings passing directly through the frames and planks so as to be visible from outside the hull (Flecker, 2001). The woods found in the Belitung ship were of high quality; teak was especially prized for its durability but other woods were perfectly acceptable in shipbuilding. The tenth-century Sirafi merchant Abu Zaid al-Hasan ibn Yazid al-Sirafi describes the coconut tree as almost the perfect commodity for shipwrights and traders alike:

There are people, at Oman, who cross over to the islands [probably the Maldives] that produce the coconut, carrying with them carpenters' and all such like tools; and having felled as much wood as they want, they let it dry, then strip off the leaves, and with the bark of the tree they spin a yarn, wherewith they sew the planks together, and so build a ship. Of the same wood they cut and round away a mast; of the leaves they weave their sails, and the bark they work into cordage. Having thus completed their vessel, they load her with coco-nuts, which they bring and sell at Oman. Thus is it that, from this tree alone, so many articles are convertible to use, as suffice not only to build and rig out a vessel, but to load her when she is completed, and in a trim to sail (al-Sirafi, 1995: 89).

Al-Sirafi notes that shipwrights in the Persian Gulf applied a whale-oil preservative to their hulls. Despite the value of whale oil, whaling was a cautious enterprise, probably

limited to harpooning already dead whales and towing them to shore where ‘This oil, mixed up with another kind of stuff, in use with seamen, serves for caulking [read, preserving] of ships, to secure the seams of the planking, and to stop up leaks’ (Al-Sirafi, 1995: 95). Whale oil was probably the substance of choice, but it was not the only one, and a later visitor to Aden noted that shipwrights there coated their hulls with *nura*, a compound of lime and animal fat (Margariti, 2007: 56-57, 161).

The nature of Indian shipbuilding in the medieval period is difficult to assess on the basis of archaeological finds and written references to ships. Despite a widely held belief that medieval shipwrights of the Indian subcontinent built ships using sewn-plank fastening, our assumptions of how Indian ships were constructed, or even what they looked like, are based on a single archaeological site, a few quotations from written sources and a handful of visual representations. There is in fact no hard evidence for sewn-plank fastening in India per se before the early sixteenth century (Tomalin et al., 2004: 257; McGrail, 2001: 272). Given that the subcontinent was home to myriad states of great cultural, linguistic and technological diversity, what is known from one isolated text or archaeological find may have no broader application. The most compelling pictorial representation is a seventh-century wall painting from the Ajanta Cave. The principle sails, one on each of three masts, are oriented like square-sails, but they are considerably taller than they are wide, and there appears to be a single headsail set out over the bowsprit (Fig. 1). The bow is

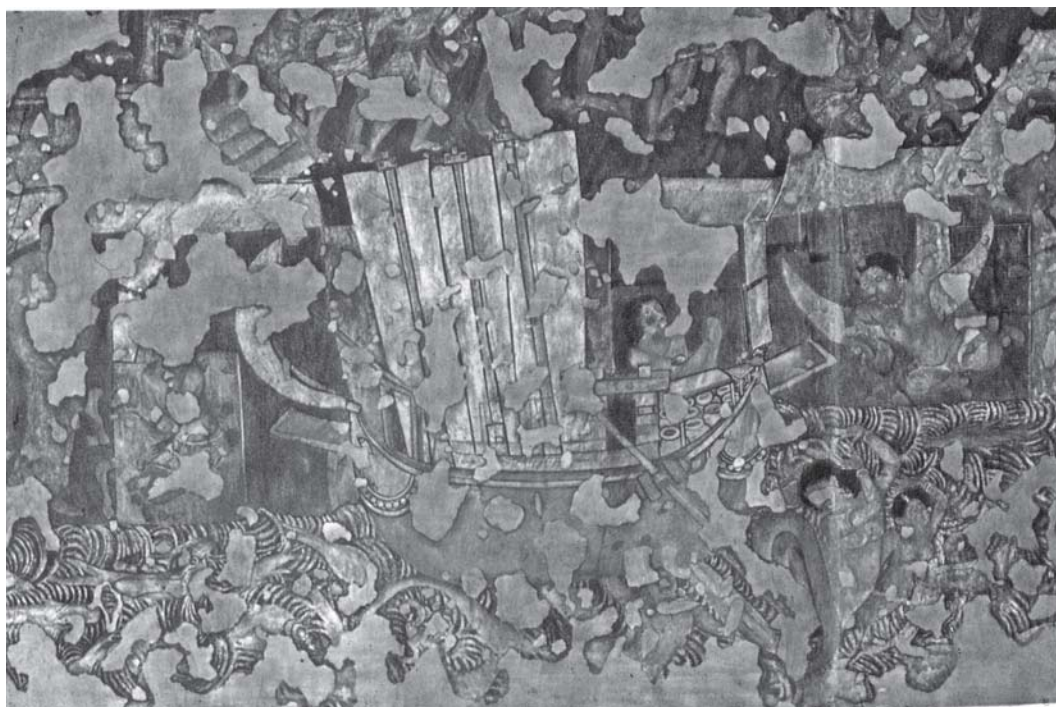


Fig. 1 The ship depicted in an illustration of the Purna-Avadana *Jataka* painted in Ajanta Cave 2.

also adorned with an oculus, or eye, to help the ship see danger, while a flag flies at the stern. A side steering oar is clearly visible on the port quarter, while a number of open jars, possibly for drinking water, can be seen beneath a shelter on deck (Agius, 2008: 209; Hadi Hasan, 1928: 89-90; Needham, 1971: 454-55; Deloche, 1999; Schlingloff, 1976). According to a passage on ships and shipbuilding in the *Yuktikalpataru* (the wishing tree of artifices) by Bhoja, an eleventh century king of landlocked Malwa (in modern Madhya Pradesh), 'iron should not be tied to a seagoing vessel by means of a string because that iron may be attracted with magnetic iron in the sea and may cause danger' (Chaudhuri, 1976: 140). The most widely accepted interpretation of this passage is that 'no iron [should be] used in holding or joining together the plank of bottoms intended to be seagoing vessels, for the iron will inevitably expose them to the influence of magnetic rocks in the sea, or bring them within a magnetic field and so lead them to risks' (Mookerji, 1912: 21; Tomalin et al., 2004: 257-58). But magnetic attraction was likely not considered the significant problem this suggests, for a later passage in the *Yuktikalpataru* refers to 'special vessels made of the foil of iron and copper etc. or of lode-stone' (Chaudhuri, 1976: 140-41). Certainly a hull sheathed in 'the foil of iron' would be at as much risk from 'magnetic iron in the sea' as a hull merely fastened with iron fittings. An injunction against iron also makes little sense given the importance of iron in Indian Ocean trade, which was routinely carried between the subcontinent, Arabia and East Africa, the last of which was the source of most of the iron used in Southwest Asia by the twelfth century (McPherson, 1993: 115-18).

Only one medieval hull has been found in all of India and it does little to clarify our understanding of shipbuilding traditions on the subcontinent. Excavated on the Kerala coast about thirty kilometres south of Cochin in 2002-2003, the Thaikkal-Kadakkarappally boat was a two-masted vessel about twenty-one metres long and four meters in beam. Most unexpected, the planks, which have been dated to between the eleventh and fifteenth centuries, were fastened with clenched nails. The vessel has many other features not normally attributed to Indian Ocean shipbuilding traditions, including a double thickness of planking, and bulkheads inserted into the frames to subdivide the hull into eleven compartments. Although these features are common to Chinese vessels, the wood is native to Kerala where the vessel probably spent its working life. If these attributes are not characteristic of indigenous practice in medieval Kerala, they might have been introduced by Chinese sailors who began frequenting southern India during the Song Dynasty (Tomalin et al., 2004: 259-62).

Beginning in the seventh century, Indian Ocean mariners led the process of integrating the disparate regional markets of the Monsoon Sea between East Africa and the Red Sea in the west, and Southeast Asia and China in the east. In so doing, they laid the foundations for the all but uninterrupted maritime growth of this region that has lasted to the present

day. Slender though the quantitative evidence for the period is, the maritime trade of Monsoon Asia shows many of the hallmarks of what we now call globalization. Unlike imperial projection of one culture or economy over another, this process creates networks of interdependence in which changes in one place can have ripple effects that spread from region to region. The clearest manifestations of this are seen in the rise and shifting fortunes of the Islamic caliphates and the Tang and Song dynasties, whose wealth exerted powerful forces on the maritime endeavour of the two realms, as well as on other regions from East Africa and India to Southeast Asia and Japan. The resulting interdependency had many positive benefits, facilitating the growth of commerce and its underlying enterprises from agriculture to crafts, and encouraging the spread of religion and technology. At the same time, technological and political change in one place could have a negative impact on another, not only regionally but also across thousands of miles.

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Endnotes

- ¹A Chinese Buddhist pilgrim and translator, Xuanzang spent seventeen years (630-647 AD) in India, to and from which he travelled via the Silk Road.
- ²In Sanskrit verse, a *śloka* is a poem of two sixteen-syllable lines. The *Tripitakas* are the three ‘baskets’ of Buddhist scripture: the discourses or sermons of Buddha, monastic rule, and scholastic treatises.
- ³Kalah, Sailendra Java, al-Zabaj: Arabic accounts refer to Kalah and al-Zabaj over many centuries. Kalah referred to Takuapa on the west coast of the Malay Peninsula until the eleventh century, after which it was used of Kedah, to the south (Hall, 1985: 200; Tibbetts, 1979: 118-128). Al-Zabaj probably refers to Java until 860, when a younger member of the Sailendra Dynasty established himself on the throne of the Srivijaya kingdom at Palembang, Sumatra. The Sailendras of Java were out of power by the tenth century, and subsequent references to al-Zabaj probably indicate Sumatra (Tibbetts, 1979: 107).

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The importance of marine archaeology in India has coincided with the increasing visibility of maritime history. This has contributed to changing the perspective of the history of the sub-continent, from the land-locked history of the northern plain to incorporating the view from the peninsula. The study of the Indian Ocean becomes inevitable. The recognisable changes in maritime history relate to the economy of trade and the technology involved. In both these areas maritime archaeology provides data. Shipwrecks can confirm evidence on the volume of trade and the items traded. Ships' timbers, cloth fragments, cargoes, tell their own story. Viewed from the Indian peninsula, the span of the Indian Ocean trade went from West Asia to South-east Asia, initially dependent on the monsoon winds, until the technology of ship-building overcame this. Eventually this trade linked Tunis, Egypt, the Red Sea, India, South-east Asia and southern China. The Afro-Asian maritime links were a counterpart to the land-based Silk Road. The inter-dependence of economies and of settlements is striking. European enterprise, though a late arrival, changed the economy of Asia. The papers in this book refer to many parts of the world, and many aspects of maritime history and shipwrecks. It therefore makes a fine and illuminating introduction to marine archaeology as a historical source.

—**Romila Thapar, Professor Emerita of History, Jawaharlal Nehru University, New Delhi**



In '*Maritime Contacts of the Past: Deciphering connections amongst communities*', volume Sila Tripathi has gathered a sterling assemblage of authors who cover maritime archaeological subjects that span the globe from the North Atlantic to the Indian Ocean, from the South Atlantic to the Pacific, and seas too numerous to name individually. Similarly, the myriad countries from New Zealand to Namibia, from Bahrain to Brazil, from Australia to Sweden are far too many to list. I know of no other work that offers such a broad geographical range of topics related to this relatively new field of research. Not only are specific shipwrecks described and interpreted by their excavators in this exceptional collection, but some of the world's leading practitioners discuss subjects as diverse as ceramics, hull construction, conservation, wood identification, depictions of watercraft, anchors, localized rigging, maritime trade, naval warfare, and ports and harbours. In addition there are essays on the state of maritime archaeology in particular locales, from Korea to Sri Lanka to Spain and France, as well as on the past and future of the field of maritime archaeology in general, and the role of laws to protect our underwater cultural heritage. The chapters I have read in advance of publication compel me to offer heartiest congratulations to Sila Tripathi for putting together this unique reference.

—**George F. Bass, Institute of Nautical Archaeology at Texas A&M University**



Maritime Contacts of the Past: Deciphering Connections amongst communities, is a collection of papers from some of the world's leading maritime archaeologists. In all, 31 papers on maritime archaeology and maritime trade from around the world. This publication will be an important contribution to the study of maritime archaeology of the world. The subject is becoming popular in India where many universities and research institutions are becoming involved in the field. This volume is intended to provide the latest information for Indian as well scholars and students of other countries. The Marine Archaeology Centre of the CSIR-National Institute of Oceanography in Goa has an impressive publication record with papers published in *Journal of Archaeological Science*, *Antiquity*, *World Archaeology*, *International Journal of Nautical Archaeology*, *Current Science*, *Bulletin of the Australian Institute for Maritime Archaeology*, *International Journal of Maritime History*, *Man and Environment* and *Mariner's Mirror*. In addition, the Centre has published a number of books on maritime archaeological subjects relating to shipwrecks and archaeological sites in Indian waters. This is an impressive record and to be commended. Maritime archaeology is a relatively new discipline, but is growing and expanding as an academic subject. Publications such as this will help to develop the field and ensure that underwater cultural heritage is preserved and protected.

—**Jeremy Green, Western Australian Maritime Museum, Fremantle, Western Australia**



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